# DELIVERING THE VIS I O N

One of the Nation's Leading Providers of Low-Cost and Cleaner Energy by 2020



Low Rates



High Reliability



Responsibility



Cleaner Air



More Nuclear Generation



Greater Energy Efficiency



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This document is not intended as a stand-alone narrative of all strategic issues facing the corporation, nor does it address detailed resource planning issues such as forecasting future load requirements or assessing supply and demand alternatives. Rather, it is intended as a support document for interactive discussions on strategy development and operational planning.

# Letter From the CEO

Every successful organization needs a vision. Several great thinkers – including two U.S. presidents – understood the importance of being able to envision where they wanted themselves, or their organization, or their nation to be in the future.

Abraham Lincoln once said, "Determine that the thing can and shall be done and then we shall find the way." Franklin D. Roosevelt said, "The only limit to our realization of tomorrow will be our doubts of today." Neither of these men were strangers to uncertain times. They both dealt with periods of unprecedented change and upheaval, but they both also understood what they wanted to achieve and the direction they needed to go.



**Tom Kilgore**President and Chief Executive Officer
Tennessee Valley Authority

The utility industry is facing its own period of unprecedented change. There is a need for new generation and transmission infrastructure, but rising costs of construction and commodities will complicate and limit our choices. New regulations on coal will affect the economics of the backbone of TVA's generating fleet and require us to modernize. New technologies, such as electric vehicles and smart grid, may result in significant changes in how we manage the power system. And with the arrival of new, sensitive electronic devices in both homes and businesses, even momentary interruptions in the supply of electricity are becoming unacceptable.

The changing economy, social and political upheavals, global events and ever-present uncertainty are among the major considerations all utility planners must face. While the decisions we make today will help us build the power system of 2020, we will be living with the consequences of those decisions for many decades longer.

To navigate this challenging landscape, TVA took a long, hard look at both the challenges we face and the considerable resources we have available. Planning a power system to meet conditions a decade from now is a complex task. We brought to bear some of the best planners in the industry and sophisticated modeling software that can sift through many variables and provide a range of choices.

The result is a straightforward vision of the future:

#### "One of the Nation's Leading Providers of Low-Cost and Cleaner Energy by 2020"

The purpose of this document is to provide a summary of what is behind TVA's vision and what it will take for TVA to make it a reality. This vision is backed up by a growing body of detailed plans to help accomplish it. However, it is our employees who will ultimately bring these plans to life and make TVA effective, efficient and highly productive. We will work hard to revitalize TVA's values and build a strong culture of improvement. The vision offers the springboard to launch this transformation across TVA.

Sincerely,

Tom Kilgore

TVA President and CEO

# The TVA Board of Directors



Chairman Dennis Bottorff of Nashville, Tenn., serves as chairman and partner of Council Ventures, a venture capital firm. He was chairman of AmSouth Bancorporation in Nashville until his retirement in 2001 and previously was chief executive officer of First

American Bank. His term expired May 18, 2011.\*



Marilyn A. Brown of Atlanta, Ga., is a professor of energy policy at Georgia Institute of Technology's School of Public Policy and a distinguished visiting scientist at Oak Ridge National Laboratory. The author of more than 200 publications, she was recognized by

the Intergovernmental Panel on Climate Change for her contributions that led to the IPCC's receipt of the 2007 Nobel Peace Prize. Her term expires May 18, 2012.



Mike Duncan of Inez, Ky., is chairman, chief executive officer and director of Community Holding Co. and chairman, chief executive officer and director of Inez Deposit Bank. He is a director of the Regional Center for Rural Development. His term expired May 18, 2011.\*



Tom Gilliland of Blairsville, Ga., recently retired as executive vice president, general counsel and secretary of United Community Banks Inc. He is a former chief of staff to Georgia Lt. Gov. Pierre Howard and served as chairman of the Stone Mountain

Authority under Georgia Gov. Roy Barnes and Gov. Sonny Perdue. His term expired May 18, 2011.\*



William Graves of Memphis, Tenn., is presiding Bishop of the Christian Methodist Episcopal Church. He was previously pastor of the Phillips Temple CME Church of Los Angeles. He is the immediate past president of the board of the National Congress of

Black Churches and a former member of the board of Memphis Light, Gas & Water. His term expires May 18, 2012.



Barbara S. Haskew of Chattanooga, Tenn., served for eight years as distinguished professor of economics at Middle Tennessee State University, where she also provided leadership for more than 20 years as chair of the department of economics

and finance, dean of the College of Business Administration and vice president and provost of the university. She previously managed TVA's rate staff for eight years. Her term expires May 18, 2014.



Richard Howorth of Oxford, Miss., served two terms as Mayor of Oxford and is founder and owner of Square Books, a leading independent bookstore in Oxford. As mayor, he was chairman of the authority overseeing the Oxford Electric Department. He served

eight years as a director and officer of the North Mississippi Industrial Development Association and is former president of the American Booksellers Association. His term expires May 18, 2015.



Neil McBride of Oak Ridge, Tenn., is a public-interest advocate and national leader in the field of public interest law. He is general counsel with the Legal Aid Society of Middle Tennessee and the Cumberlands, a nonprofit law firm that gives free legal help in civil cases

to people in need. He is also an adjunct professor at the University of Tennessee College of Law. His term expires May 18, 2013.



William B. Sansom of Knoxville, Tenn., has been chairman and chief executive officer of the H.T. Hackney Co. since 1983. Hackney is a diversified company involved in wholesale grocery supply and furniture manufacturing. He previously served on the

TVA board from 2006 to 2009 and was chairman from 2006 to 2008. His term expires May 18, 2014.

\* Under the TVA Act, directors whose terms expire in a given year may continue to serve until a replacement is sworn in or the current Congress adjourns.

# Jovernance Council

TVA's day-to-day operations are managed by the Governance Council, whose members are:



Tom Kilgore President and Chief Executive Officer





Bill McCollum Chief Operating Officer



Kim Greene Group President, Strategy and External Relations



Janet Herrin Executive Vice President, People and Performance



Ken Breeden Executive Vice President, Performance Transition Office



Joe Hoagland Vice President, Office of the Chief Executive Officer



John Thomas Chief Financial Officer and Executive Vice President. Financial Services



**Dan Travnor** Chief Information Officer and Vice President, Information Technology



Ralph Rodgers General Counsel

# Executive Summary

# Why has TVA produced the document *Delivering the Vision?*

Along with the rest of the electric utility industry, TVA has experienced considerable challenges since 2007, when it adopted its strategic plan. To address these challenges, TVA's Board and executive leadership reviewed and confirmed TVA's focus for the next decade. This document, *Delivering the Vision*, communicates TVA's strategic direction to customers, stakeholders, and employees and begins with the vision:

# "One of the Nation's Leading Providers of Low-Cost and Cleaner Energy by 2020"

With this vision, TVA remains committed to improving the quality of life in the Valley.

#### What industry challenges led to TVA's vision?

Since 2007, the nation has experienced the worst recession since the 1930s, resulting in difficult economic conditions and decreased customer demand. In addition, more stringent environmental regulations have impacted generating resources and production costs, and the timing and magnitude of pending regulations create uncertainty. Customers and stakeholders are also expecting less impact on the environment from operations. TVA is taking actions to address these challenges, such as retiring older coal-fired generating units, changing the way it stores coal ash, aggressively installing clean air equipment, and continuing its focus to ensure safe operation of its nuclear fleet in light of global events.

#### What is TVA's strategic direction?

TVA's vision to lead the nation toward a cleaner energy future provides a platform for success by emphasizing six strategic focus areas. The first three focus areas – Low Rates, High Reliability, and Responsibility – reflect TVA's original mission and support core business improvement. The final three – Cleaner Air, More Nuclear Generation, and Greater Energy Efficiency – support TVA's role as an industry leader by addressing critical industry challenges.

#### How does achieving the vision create value?

By actively managing a portfolio of assets and applying financial discipline, TVA is able to provide low-cost, reliable power while fulfilling its public service mission to improve the quality of life for customers, stakeholders, and residents of the Tennessee Valley region. TVA's value to the region and nation includes:

- Providing low-cost, cleaner energy
- Maintaining the highest, affordable reliability
- Protecting and enhancing natural resources
- · Balancing the multiple uses of the river
- · Attracting sustainable jobs and capital investment
- Leading the region and nation in areas critical to a cleaner energy economy

# How will TVA's strategic direction be implemented?

An integrated plan, based on internal capabilities and external market analyses, has been developed to achieve strategic aspirations in each focus area under the vision. This plan will link strategy to business unit implementation and provide employees with a direct line of sight as to how their work supports the vision. TVA's success will be measured using a vision scorecard. Processes will be established to monitor progress and update the plan.

# Introduction to TVA

The Tennessee Valley Authority, an agency of the U.S. government, is the nation's largest public power provider and one of the country's largest electric utilities. TVA supplies electricity for customers in most of Tennessee and parts of Alabama, Mississippi, Kentucky, Georgia, North Carolina, and Virginia – an area of about 80,000 square miles with a population of more than nine million.

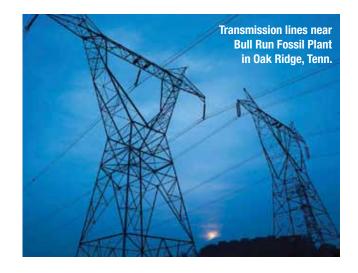
TVA provides electricity to local public power companies and directly served customers. Its generating assets include three nuclear plants, 11 coal-fired power plants, 29 hydroelectric dams, 12 natural gas-fired power facilities, a pumped-storage hydroelectric facility, and several renewable energy sites. Together, they produce about 34,000 megawatts of electricity or generating capacity, delivered over 16,000 miles of high-voltage power lines.

The corporation oversees 11,000 miles of shoreline, 600,000 acres of water, and 293,000 acres of land. TVA also fosters economic development throughout its service area in partnership with its customers and other public and private entities to bring quality jobs to the region and to encourage sustainable development.

TVA stakeholders include customers, public officials, bondholders, business and community leaders, environmental advocates, economic development leaders, and TVA employees and retirees.

#### **Customer Facts**

- 155 local public power companies
  - 105 municipal utility companies
  - 50 cooperatives
  - Account for about 86 percent of TVA's revenue
- 57 directly served customers
  - 51 large industrial customers
  - 6 large federal installations
  - Account for about 14 percent of TVA's revenue



#### TVA PROFILE

- Corporate agency of the United States of America
- Founded in 1933
- · Receives no federal appropriations
- 12,000+ employees
- Diverse 37,000 MW generating portfolio of coal, nuclear, hydro, natural gas, renewable resources and power purchase agreements
- Manages the nation's seventh largest river system
- Revenues of \$10.9 billion in 2010
- Paid more than \$550 million in tax equivalent payments in 2010
- Transmission scores 99.999 percent reliability for 11 consecutive years
- More than \$5 billion invested in clean-air controls reducing coal plant emissions to a fraction of previous levels; outpacing national average

To learn more about TVA, visit www.tva.com.

# Generation Assets and Service Area



Coal-Fired
11 Plants | 59 Units

Allen Bull Run Colbert Cumberland Gallatin John Sevier Johnsonville Kingston Paradise Shawnee Widows Creek



Nuclear 3 Plants | 6 Units

Browns Ferry Sequoyah Watts Bar



#### **Hydroelectric** 29 Plants | 109 Units

Apalachia Great Fa
Blue Ridge Gunters
Boone Hiwasse
Chatuge Kentuck;
Cherokee Melton F
Chickamauga Norris
Fontana Nottely
Fort Loudoun Ocoee 1
Fort Patrick Ocoee 2
Henry Occee 3

Great Falls Pickwick Guntersville South Holston Tims Ford Hiwassee Kentucky Watauga Melton Hill Watts Bar Nickajack Wheeler Norris Wilbur Nottely Wilson Ocoee 1



## Pumped Storage 1 Plant | 4 Units

Raccoon Mountain



#### **Combustion Turbine** 9 Plants | 87 Units

Allen Brownsville Colbert Gallatin Kemper Gleason Lagoon Creek Johnsonville Marshall



Combined Cycle
4 Plants | 10 Units

Caledonia Southaven

Lagoon Creek Magnolia
John Sevier (under construction)



**Diesel Generator** 2 Plants | 9 Units

**Wind Energy** 

Meridian, Miss.

Albertville, Ala.



1 Site

. . .



#### **Solar Energy** 14 Sites

Adventure Science Center
Dollywood Site #1
Dollywood Site #2
Ijams Nature Center
Cocke County High School
Duffield-Pattonville Primary School
American Museum of Science and Energy
Lovers Lane Soccer Complex
Finley Stadium
Florence Water Treatment Facility
University of Mississippi
Mississippi State University
BRIDGES Center
Morgan County Vocational Technical School



Digester Gas

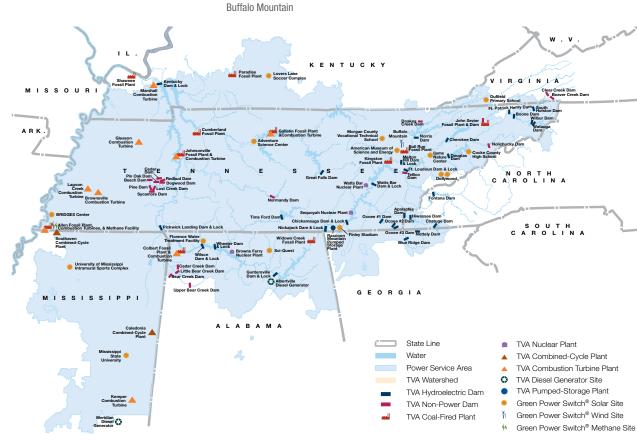
1 Site

Allen



**Biomass Cofiring**1 Site

Colbert



# TVA's Mission

TVA was created to lift the Tennessee Valley region out of the Great Depression through an integrated approach of generating and transmitting low-cost electricity, addressing environmental challenges, and fostering economic development. TVA's mission continues with five key deliverables:



#### Low-Cost, Reliable Power

TVA will provide competitively priced, reliable electricity; improve its operational performance; achieve greater energy efficiency and demand-side capabilities; and maintain the financial flexibility to deliver long-term value for customers and stakeholders.



#### **Environmental Stewardship**

TVA will continue to strengthen its industry-leading reputation in environmental stewardship of air quality, water resources, waste minimization, sustainable land use, and natural resource management.



#### **Economic Development**

TVA will continue to attract and retain jobs, including clean energy jobs and capital investments that foster sustainable economic growth. As the corporation continues to deliver the affordable, reliable electric power that businesses depend on, it will also seek new opportunities to promote regional development.



#### **Technological Innovation**

TVA will advance energy and environmental technologies, concentrating on technologies where TVA's work can make a difference in the nation's transition to cleaner energy.



#### River Management

TVA will provide essential public services through integrated water and land management, flood control, navigation requirements, and recreation.

"The work of TVA will never be done...there will always be new frontiers to conquer!"

- President John F. Kennedy May 18, 1963

# TVA's Business Structure

TVA delivers value to its customers and the public through its unique business model and its integrated approach to resource management. The government-owned corporation receives no taxpayer money, reinvests net income in its power system, and offers electricity prices to the region that are below the national average.

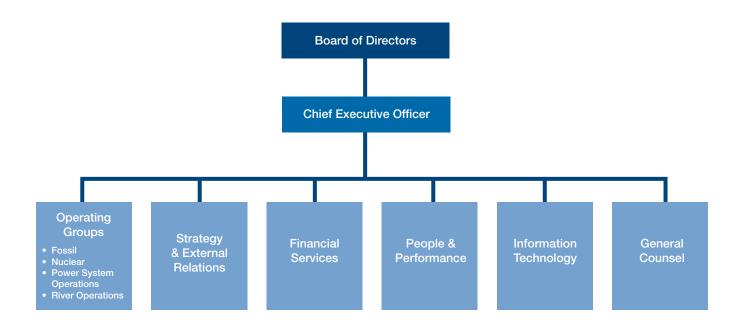
Federal appropriations for the TVA power program ended in 1959, and appropriations for TVA's essential environmental stewardship and economic development activities were phased out in 1999. TVA now funds all its operations from the sale of electricity and financings. TVA also returns funds to the U.S. Treasury. Through 2010, TVA had paid back to the U.S. Treasury more than \$3.7 billion, including interest, on the government's \$1.4 billion original investment in TVA's power program. The U.S. government retains permanent equity in TVA.

While exempt from local and state taxes, TVA makes tax equivalent payments to states and localities comparable to taxes paid by private companies.

TVA's governance structure, updated by Congress in 2005, shares some similarities with that of a private corporation. Policy direction and oversight are provided by a nine-member, part-time board of directors, and ongoing operations are managed by a full-time chief executive officer. Members of the TVA Board are appointed by the President of the United States and confirmed by the U.S. Senate.

While TVA's business structure has evolved, its current borrowing authority of \$30 billion is more than three decades old. TVA's primary means of raising capital for major investments are power revenues, bonds and other forms of financing. TVA's bonds are not explicitly guaranteed by the federal government. TVA ended fiscal year 2010 with \$23.4 billion in bonds and notes.

TVA files its financial statements with the Securities and Exchange Commission. An independent TVA Inspector General monitors TVA operations and reports to Congress twice a year.



# Strategic Shift for TVA

Since the development of the 2007 Strategic Plan, TVA has experienced the worst U.S. recession since the 1930s, a more stringent regulatory environment, the Kingston Fossil Plant coal ash spill, dramatic changes in commodity prices, and a challenging financial market. The electric utility industry is expected to see an "unprecedented, continuing change in the generation fuel mix," according to the North American Electric Reliability Corporation's 2010 Long-Term Reliability Assessment.

To meet these challenges, TVA developed an Integrated Resource Plan (IRP) to analyze alternatives to meet the region's electricity needs for the next 20 years and adopted a vision for 2020. The IRP, titled *TVA's Environmental and Energy Future*, was authorized for use by the TVA Board in April 2011. The IRP and TVA's vision support a strategic shift to a cleaner, more efficient and even more diverse generating portfolio, including:

- Investing in additional clean-air controls
- · Idling or retiring aging coal units
- Increasing generation from clean resources such as nuclear and renewables
- · Promoting energy efficiency and demand response
- Exploring and embracing effective new technologies

In addition to the IRP and TVA vision, TVA developed the 2008 Environmental Policy and recently completed a Natural Resource Plan as a companion to the IRP, which will set the stage for stewardship activities for the next 20 years.

TVA has announced plans to retire 2,700 megawatts of coal capacity through the end of 2017. TVA is also increasing its use of renewable energy and cleaner resources such as Watts Bar Nuclear Plant Unit 2 and the John Sevier Combined Cycle Plant. Both of these plants are currently under construction and should be online by the summer of 2013. In addition, TVA settled longstanding Clean Air Act disputes with the U.S. Environmental Protection Agency, four states, and three environmental advocacy groups in 2011, resolving how the Act applies to routine maintenance and equipment replacement at TVA fossil plants.

TVA is improving its financial health by reducing existing debt and using the most economical financing for new investments.

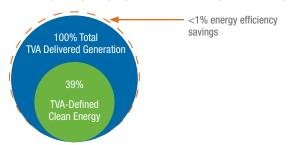
TVA will adhere to the following financial guiding principles:

- · Retire debt over the useful life of assets
- · Issue new debt only for new assets
- Use regulatory treatment for specific unusual events
- Increase rates as necessary to fund operational spending
- Align rate actions with TVA's vision and strategic direction

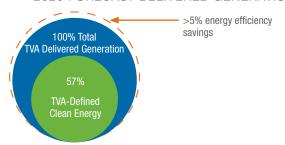
TVA's strategic shift to cleaner, more efficient resources, and adherence to a strict financial discipline will provide significant value for customers and stakeholders. The shift will support cleaner air, competitive rates, and the ability to respond to changing market conditions using TVA's diverse generation portfolio.

# TVA's portfolio becomes cleaner and more efficient from 2011 to 2020

#### 2011 FORECAST DELIVERED GENERATION



#### 2020 FORECAST DELIVERED GENERATION



TVA-defined clean energy includes nuclear, hydro, and renewables

# TVA's View of the Competitive Landscape

According to Edison Electric Institute, electric utilities are projected to spend upwards of \$80 billion per year for the next decade to upgrade aging infrastructure to meet mounting regulatory and market pressures. TVA is not immune to these pressures and faces difficult choices in an ever-changing environment to deliver value to customers and meet its commitments to its stakeholders.

TVA's vision, coupled with its view of the competitive landscape, shapes investment decisions. To assist in making strategic decisions, TVA developed the following key market beliefs and internal capabilities.

#### Power Demand and the Economy

- Sluggish, uneven economic growth as the economy recovers
- Electricity consumption growth around one percent with demand slightly outpacing energy
- Electric vehicle adoption, steep economic recovery, and technological breakthroughs could have large impacts on electricity requirements
- Stable reserve margins by end of decade

#### Customers/Stakeholders

- Consumers want more options and value from their energy dollar – seeking new ways to economize
- Energy use is changing with an endless stream of new electronic devices that are constantly connected
- Sizable economic energy efficiency opportunity exists in the Tennessee Valley
- All stakeholders want less environmental impact from energy production
- Consumers expect more choices in managing use, greener production, and zero interruption without higher costs



#### **Utility Sector and Capital Markets**

- Diminishing credit market concerns and moderate increases in long-term interest rates expected as the economy rebounds
- Power market consolidation continues given the need to increase economies of scale
- Uncertainty of key value drivers (e.g., load growth, fuel supply, and commodity prices) stresses traditional utility planning processes

#### **Fuel Supply and Demand**

- Rising domestic natural gas production combined with regulatory pressures on coal favor natural gas capacity expansion
- Continued competition between coal and gas, with gas setting marginal electricity prices during peak and even off-peak periods
- Financial instruments are available to manage gas price risk

#### Regulation and Legislation

- Stringency and timing uncertain on new regulations for air, water, waste, renewables, and carbon
- President Obama has issued a goal to achieve 80 percent of electricity from "clean energy sources" by 2035
- Uncertainty concerning nuclear standards and regulation after Japan's Fukushima nuclear incident

#### **Technology**

- Increased adoption of plug-in hybrid electric vehicles could affect shift demand
- Energy efficiency and demand response contribution dependent on smart grid evolution, adoption of technologies, and consumers' choices
- Small modular reactors could lower financial risk, better match demand, and increase plant safety
- Advances in horizontal drilling for natural gas and smart grids may delay investments in solar and wind
- Electricity storage could be a game changer
- Timing of clean energy technology becoming cost competitive with traditional generation uncertain

#### **Internal Capabilities and Resources**

- Skilled, diverse, engaged workforce
- · Mission-oriented culture
- Strong licensing, engineering, and construction capabilities with cost competitive nuclear options
- Scale and breadth of transmission and generation experience
- New rate structure provides opportunities for new products and services
- Recognized leadership in economic development and integrated river management
- Diverse generating portfolio
- Age and condition of coal fleet, combined with nuclear option, provides opportunity to further diversify TVA's portfolio
- Advantageous gas supply and transmission location
- Capital restrictions may limit investment opportunities and put upward pressure on rates



# TVA's Vision and Strategic Focus Areas

### TVA'S VISION

"One of the Nation's Leading Providers of Low-Cost and Cleaner Energy by 2020"

For almost 80 years, TVA has helped foster a vibrant economy and a better quality of life. TVA's vision reflects its continued commitment to the residents of the Tennessee Valley region and the nation. Every decision TVA makes going forward must be measured against our vision.

Achieving the vision requires a strategic platform that supports continued success. TVA will build the platform on six strategic focus areas. The first three support improvement in the core elements of TVA's traditional mission – Low Rates, High Reliability, and Responsibility. The other three support TVA's role as an industry leader in addressing the challenges of achieving a cleaner energy future – Cleaner Air, More Nuclear Generation, and Greater Energy Efficiency. The ultimate goal of each focus area is to contribute to a low-cost, cleaner supply of energy that serves as an economic and environmental advantage for the people of the region.

## Six Strategic Focus Areas

TVA will meet the region's needs for the future and improve its core business.

#### **CORE BUSINESS**



#### 1. Low Rates

Be one of the lowest cost power providers in the region and the nation



#### 2. High Reliability

Be one of the nation's leaders in customer reliability



#### 3. Responsibility

Build trust by carrying out the mission and creating public value

#### INDUSTRY LEADERSHIP



#### 4. Cleaner Air

Lead the nation in improving air quality



#### More Nuclear Generation

Lead the nation in increased nuclear generation



## 6. Greater Energy Efficiency

Lead the Southeast in energy efficiency

In pursuing the vision, TVA is committed to high performance and operational excellence; establishing a strong culture of safety and compliance; partnering with stakeholders in a collaborative and transparent manner; and making decisions consistent with sound financial principles.

Be one of the lowest cost power providers in the region and the nation

#### **Creating Value**

Low-cost power stimulates the local economy by improving the standard of living and attracting new businesses and industries to the region.

Low rates are an objective of many utilities across the nation. TVA's mission, however, mandates that TVA provide power at the lowest feasible cost while funding the other mission areas. TVA will set its rates as low as feasibly possible consistent with sound business practices and the full recovery of its costs. Diversifying the generating portfolio and implementing initiatives to improve operational performance will reduce costs over the long term and create value for customers and stakeholders.

In setting rates, it is important that the pricing structure sends efficient price signals, recovers needed revenue, and minimizes cost of service variance.

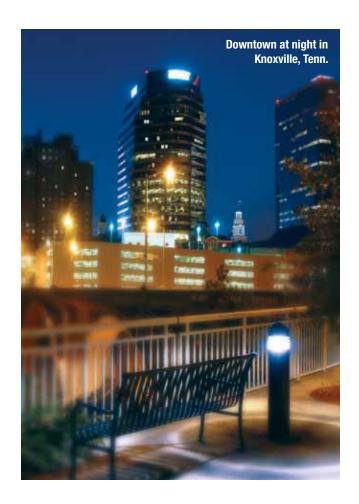
#### Strategic Objective

• Provide low-cost energy

#### **Key Performance Indicator**

Retail rate

- TVA rates, when compared to peers, are competitive but could be lower
- Customers are focused on rates and total bills
- Rate design should promote efficient use
- Power revenues must support fulfillment of TVA's multi-faceted mission
- Improved operational performance drives lower revenue requirements
- Adherence to financial guiding principles preserves TVA's financial health
- Increased financial flexibility allows TVA to achieve its mission in the most cost-effective manner





Be one of the nation's leaders in customer reliability

#### **Creating Value**

Reliable power is necessary for quality of life and for a healthy economy through business retention and expansion. It is also essential to public safety through enabling information and security systems and public welfare through hospitals, food safety, and heating/ cooling systems.

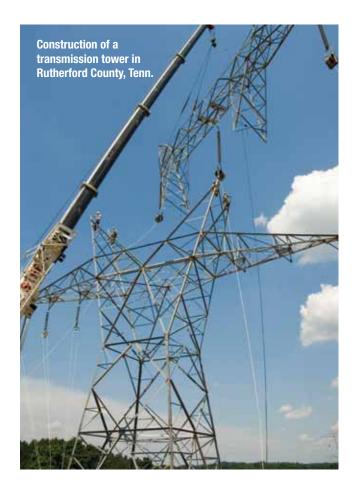
TVA owns and operates one of the largest and most reliable transmission systems in North America, serving more than nine million people in an 80,000-square-mile area spanning portions of seven states. TVA's transmission system moves electric power from the generating plants to local power companies and to industrial and federal customers across the region. The TVA power system has delivered 99.999 percent reliability to customers for 11 consecutive years.

#### Strategic Objective

• Provide reliable energy

#### **Key Performance Indicator**

• Load not served (system minutes)



- Customers depend on reliable power
- Smart grid technology improves communication of information and enables better monitoring
- Emerging technologies create uncertain impact on demand and reliability
- Increasing need to integrate additional intermittent resources (e.g., wind, solar)
- Regional reserve margins are forecasted to tighten
- Regulations continue to drive increased focus on reliability, and all the systems, security and procedures that support it
- Portfolio changes could result from gas supply availability and price
- Mandated environmental controls complicate plant operations



Build trust by carrying out the mission and creating public value

#### **Creating Value**

Responsibility is focused on the desired outcomes of improving the quality of life in the Valley and building public trust.

Responsibility encompasses fulfillment of the core elements of TVA's mission, including 1) low-cost, reliable power, 2) environmental stewardship, 3) economic development, 4) technological innovation, and 5) river management. In addition to providing affordable, reliable power, TVA is dedicated to reducing the environmental impact from its operations, protecting and enhancing natural resources, providing leadership in sustainable economic development and technological innovation, and maximizing economic and societal benefits.

As TVA carries out its mission, it will work to ensure that customer and stakeholder needs are recognized, that solutions are the result of collaboration, and that strong partnerships with stakeholders are based on transparency, mutual respect and trust.

#### **Strategic Objectives**

- Understand what customers and stakeholders value
- Transform the culture and engage employees
- Maintain a safe and secure workplace
- Increase clean energy generation
- Promote corporate sustainability, improve water efficiency and reduce waste
- Attract and retain sustainable jobs and capital investment
- Demonstrate and promote targeted cleaner energy technologies
- Balance multiple benefits of the river system



#### **KEY ASSUMPTIONS**

- Understanding what customers and stakeholders value is vital to TVA's success
- Communicating and delivering on TVA's commitments will strengthen relationships and build public trust
- Reducing environmental impacts from operations is expected
- The Valley is well positioned for economic growth and TVA is recognized as a leader in economic development
- Focusing technology efforts and collaborating with partners will provide a greater return on investment (both capital and manpower) while enhancing results
- Integrated river management is a unique TVA advantage that produces better hydro performance while managing navigation, flood control, and recreation

#### **Key Performance Indicators**

- Integrated stakeholder assessment
- Organizational Health Index
- Recordable Injury Rate
- Clean energy generation percentage
- Water compliance
- · Land condition
- · Jobs and capital invested
- Demonstrate one of three signature cleaner energy technologies
- Reservoir Operating Compliance



Lead the nation in improving air quality

#### **Creating Value**

The attractiveness of a region is judged in part by its air quality, which contributes to quality of life and helps foster economic development.

Cleaner air supports TVA core business responsibilities of environmental stewardship and economic development by making the region a more attractive place to live and work.

#### How is TVA Positioned to Lead?

TVA has a strong track record of improving air quality. Through 2010, the corporation has invested more than \$5.3 billion to reduce sulfur-dioxide (SO<sub>2</sub>) and nitrogen-oxide (NO<sub>x</sub>) emissions at its coal-fired plants by 85 to 90 percent from peak levels, with collateral reductions in mercury emissions. TVA has also voluntarily reduced or avoided more than 300 million tons of carbon dioxide (CO<sub>2</sub>). With more stringent emission requirements on the horizon, TVA has announced plans to retire 2,700 megawatts of coal capacity at units that have higher operating costs and aging infrastructures, and will replace production from these units with increased energy efficiency and cleaner sources of energy.

TVA is continuing to assess other coal units not fully controlled and will decide whether to idle, retire, or continue to invest in those units over the next few years.

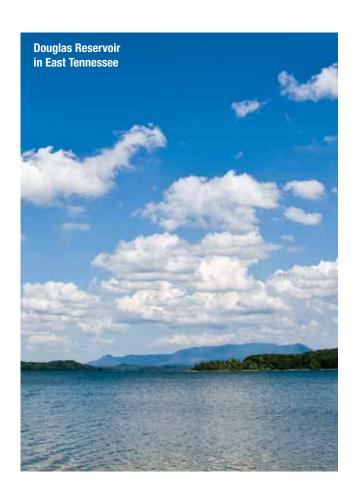
#### Strategic Objective

• Reduce emissions

#### **Key Performance Indicator**

• CO<sub>2</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emission reduction

- Longstanding Clean Air Act disputes on routine maintenance and equipment replacement at TVA plants were resolved by 2011 agreements
- More stringent environmental regulations will require reduced air emissions
- The timing and magnitude of future regulations are uncertain
- Installing environmental controls on all coal plants is not economically justified
- New generation is needed to support demand and future load growth
- Economic options that increase clean energy production are available
- Reducing load and demand requirements lowers the need for new generation





#### STRATEGIC FOCUS AREA FIVE:

# More Nuclear Generation

#### **Aspiration**

Lead the nation in increased nuclear generation

#### **Creating Value**

Nuclear power offers the opportunity to provide safe, clean, reliable and affordable power and serves the best interests of customers in the region. Nuclear provides a physical hedge against high and volatile environmental and fossil fuel costs.

Nuclear power supports TVA's core business responsibilities of 1) low levelized rates with lower production cost than fossil fuels, 2) reliability by producing uninterrupted electricity for extended periods, 3) economic development by creating jobs to support the local economy that pay 36 percent more than average salaries in the local area, and 4) environmental stewardship by producing carbonfree electricity – no greenhouse gases and only minimal emissions of air pollutants.

#### How Is TVA Positioned to Lead?

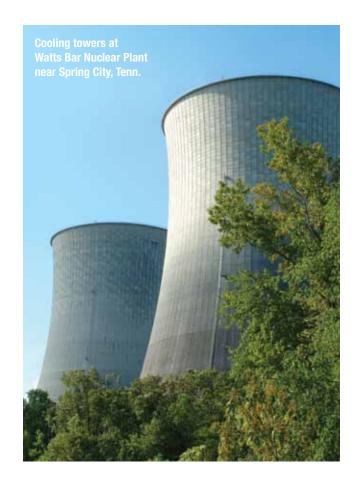
Nuclear energy became an important part of TVA's electricity generating portfolio beginning in 1974. TVA has considerable experience in nuclear power and is preparing to bring on line the first U.S. commercial nuclear reactor of the 21st century. Thirty percent of power delivered to TVA customers is nuclear. The corporation's nuclear facilities are safe and reliable and should remain a significant base load source of power into the future. TVA has unique experience, capabilities, status, and responsibilities that enable leadership in increasing nuclear generation capacity.

#### Strategic Objective

Increased nuclear generation

#### **Key Performance Indicator**

· Nuclear capacity additions



- Increasingly stringent environmental regulations on coal support nuclear industry build
- Nuclear Energy Institute projects new nuclear build out will continue
- Impacts of Japan's Fukushima Daiichi plant have been reviewed and will be continually reflected in ongoing plans and costs
- TVA advantage over industry due to the value of partially completed plants and favorable cost of capital
- Additional nuclear provides more balanced TVA portfolio
- Need for loan guarantees/subsidies are pushing industry projects further into the future
- Remains a financially viable and achievable strategy through 2020



Lead the Southeast in energy efficiency

#### **Creating Value**

Energy Efficiency programs provide benefits across the TVA power system by utilizing existing resources more efficiently, reducing the overall need for new generation capacity, decreasing the environmental impacts of power production, and helping consumers and businesses save money.

Energy efficiency supports TVA core business responsibilities of 1) low rates by reducing energy consumption and peak demand resulting in avoided energy and capacity requirements and lower costs, which help lower consumers' average monthly bill, 2) economic development by creating jobs to support the local economy in manufacturing, research and development and service and installation, and 3) environmental stewardship by reducing energy consumption which improves air quality by lowering emissions of greenhouse gases (GHG) and other pollutants.

#### How is TVA Positioned to Lead?

TVA has a strong history and involvement in promoting energy efficiency. TVA works with local power companies and directly served customers to develop a wide portfolio of energy efficiency programs. These programs targeted to residential, commercial, and industrial markets are offered through participating local power companies.

#### Strategic Objective

• Reduce energy consumption

#### **Key Performance Indicators**

- Energy savings
- Peak demand reduction

- Consumers want to understand energy costs and to save money on energy bills
- Customers want access to new technologies
- Consumers want to minimize the environmental impacts of power production
- Energy efficiency requires no long-term capital commitments
- Energy efficiency programs increase short-term costs and have a lost revenue component, but yield lower long-term costs
- Energy efficiency provides a carbon-free resource



# Achieving the Vision

In keeping with the broad mandates of the TVA Act, leadership has articulated a vision for the future. It has also established a structured process that will enable employees to translate this vision into reality through sound planning and effective performance.

#### 1 Vision

"One of the nation's **leading** providers of low-cost and cleaner energy **by 2020**"

A review of the TVA Act reaffirmed the corporation's mission mandates. A situational assessment was conducted to analyze key market forces and internal capabilities. This work formed TVA's vision, and TVA's Integrated Resource Plan process helped shape and test the feasibility of the vision.

## 2 Strategic Focus Areas

Low Rates, High Reliability, Responsibility, Cleaner Air, More Nuclear Generation, and Greater Energy Efficiency TVA continues to focus on the core business while pursuing leadership aspirations. Six strategic focus areas will guide the achievement of the vision. Aspirations and value creation were developed for each of the six focus area.

## 3 Strategic Objectives

Strategic objectives define the actions needed to achieve the vision by aligning TVA's long-term strategic direction to expected outcomes of business operations. Key performance indicators are how success will be measured for each objective.

## 4 Enterprise Strategic Planning

- Strategic Initiatives
- Targets & Milestones

Enterprise strategic planning optimizes value creation across the six strategic focus areas. The aspirations of each focus area must be balanced to determine the most effective prioritization of initiatives. Strategic initiatives close the value gap between where TVA is today and where it wants to go over the next ten years. Targets and milestones were established to monitor progress toward achieving the vision.

## 5 Business Planning

- Resources Allocation
- Projects/Programs
- Operational Targets

Business plans span a shorter horizon and maximize near-term value creation by establishing demanding, realistic targets and monitoring progress. Business plans include projects, programs, resources, and operational targets that are updated annually.

## 6 Engage Employees

- Link individuals to vision
- Communicate action plans
- Celebrate success stories

Business units align strategic objectives and initiatives with operational plans, and drive implementation within line organizations. All employees will need to help shape these plans and understand their role in achieving the vision.

On an annual basis, this strategic direction and associated plans will be adjusted and updated to address emerging industry changes and any new internal conditions that might affect TVA's ability to implement successfully. Risks and issues associated with achieving the vision will be evaluated during the review processes.

# Measuring Success - The Vision Scorecard

TVA's success in implementing its vision will be measured using the following objectives and indicators.

	Strategic Objectives	Key Performance Indicators
Low Rates  Be one of the lowest cost power providers in the region and the nation	Provide low-cost energy	Retail rate
High Reliability Be one of the nation's leaders in customer reliability	Provide reliable energy	Load not served (system minutes)
Responsibility Build trust by carrying out the mission and creating public value	General Understand what customers and stakeholders value Transform the culture and engage employees Maintain a safe and secure workplace  Environmental Stewardship Increase clean energy generation* Promote corporate sustainability, improve water efficiency and reduce waste Protect and enhance natural and cultural resources  Economic Development Attract and retain sustainable jobs and capital investment  Technological Innovation Demonstrate and promote targeted cleaner energy technologies  River Management Balance multiple benefits of the river system	<ul> <li>Integrated stakeholder assessment</li> <li>Organizational Health Index</li> <li>Recordable Injury Rate</li> <li>Clean energy generation percentage</li> <li>Water compliance</li> <li>Land condition</li> <li>Jobs and capital invested</li> <li>Demonstrate one of three signature cleaner energy technologies</li> <li>Reservoir Operating Compliance**</li> </ul>
Cleaner Air Lead the nation in improving air quality	Reduce emissions	CO <sub>2</sub> , SO <sub>2</sub> , NO <sub>x</sub> emission reduction
More Nuclear Generation Lead the nation in increased nuclear generation	Increased nuclear generation	Nuclear capacity additions
Greater Energy Efficiency Lead the Southeast in energy efficiency	Reduce energy consumption	<ul><li>Energy savings</li><li>Peak demand reduction</li></ul>

<sup>\*</sup> TVA-defined clean energy includes nuclear, hydro, and renewables.

<sup>\*\*</sup> Reservoir Operating Compliance is defined as managing the Tennessee River and its tributaries as an integrated, balanced, and efficient system in order to optimize the benefits of the river to meet long-term public power needs of the Valley.

# Living the Vision

TVA is committed to its core values, which form the basis for how people interact and collaborate with each other. These values are fundamental to the organization's culture and vital to performance improvement.

TVA's ultimate competitive advantage lies with its employees and its success depends on their capabilities and engagement. Recommitment to these values will strengthen organizational health, improve performance and help realize the vision.

TVA is focusing on the following themes to improve organizational health:

- Engage and Communicate Enable all employees to see how their work advances the vision
- Motivate and Develop Promote excellence in business performance, leadership development, and talent management
- **Drive Continuous Improvement** Support a culture that strives for efficiency, innovation, and problem-solving at all levels

Improving the way in which people and organizations across TVA work together will enhance performance and provide the foundation for continued success.



#### TVA Values

#### Safety

- We value the safety of our employees and the public we serve.
- We show our commitment to safety in our behavior, performance, leadership, and teamwork.
- We are responsible for safety our own, our teammates', and the public's.
- We think about safety 24/7 at home and at work.
- We intervene to stop unsafe behavior or conditions, and appreciate others intervening for us.

#### Integrity & Respect

- We treat each other with integrity and respect.
- We do what we say we will do.
- Our actions and words are consistent, honest, and ethical.
- We work to earn each other's trust.
- We value everyone and everyone's work.
- We assume innocence.

#### Honest Communication

- We listen to understand. We speak to be understood.
- We give and receive meaningful feedback.
- We seek other opinions. We value different perspectives.

#### Accountability

- We work on the right things.
- We are accountable for results.
- We follow the rules. We use TVA resources wisely.

#### Teamwork

- We play on a bigger TVA team.
- We value a diverse workforce.
- We collaborate. We strive for engagement.

#### Continuous Improvement

- We set high standards and goals based on external benchmarks.
- We are self-critical. We innovate and seek new ideas
- We investigate and solve problems. We learn from our mistakes.

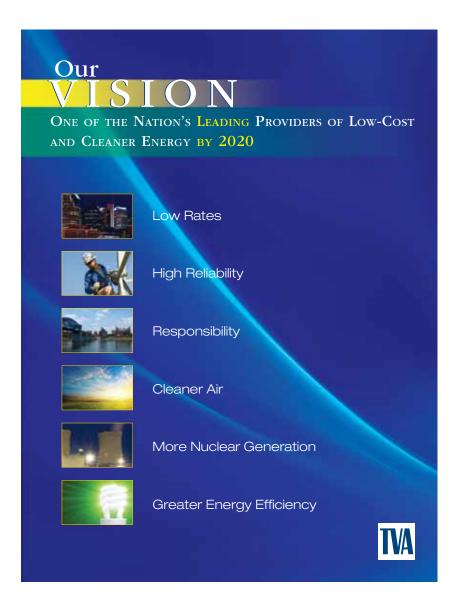
#### Flexibility

- We welcome and adapt to change.
- We respond quickly to customer needs.

# Conclusion

TVA's vision is to be one of the nation's leading providers of low-cost and cleaner energy by 2020. Achieving this vision will fulfill TVA's multi-faceted mission and establish a platform for continued success by improving operations, reducing emissions, and diversifying TVA's generating portfolio.

TVA will achieve this vision through the efforts of talented, dedicated, and motivated employees, and by working in partnership with the region it serves – all for the purpose of improving the quality of life for the citizens of the Tennessee Valley.





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To submit comments or questions, please e-mail: tvavision@tva.gov